L Number	Hits	Search Text	DB	Time stamp
1	2650	429/\$.ccls. and (electrode or double adj layer adj capacitor)	USPAT;	2002/06/27 10:58
		and (active or (mesophase near4 (activated adj carbon adj	US-PGPUB	
		fib\$3))) and (conduct\$4 or graphite) and (current adj		
		collector)		· .
10	65	(429/\$.ccls. and (electrode or double adj layer adj capacitor)	USPAT;	2002/06/27 10:17
		and (active or (mesophase near4 (activated adj carbon adj	US-PGPUB	
		fib\$3))) and (conduct\$4 or graphite) and (current adj		
		collector)) and (concentration same collector same (surface		
		or internal or inner or gradient))		
13	13		USPAT;	2002/06/27 10:42
		and (active or (mesophase near4 (activated adj carbon adj	US-PGPUB	
		fib\$3))) and (conduct\$4 or graphite) and (current adj		
		collector)) and (concentration with collector with (surface or		į
		internal or inner or gradient))		
22	0	429/\$.ccls. and (electrode or double adj layer adj capacitor)	USPAT;	2002/06/27 10:29
		and (mesophase near4 (activated adj carbon adj fib\$3)) and	US-PGPUB	
		(conductive or graphite) and (current adj collector) and		
		(concentration with collector with (surface or internal or inner		
		or gradient))		
19	4	429/\$.ccls. and (electrode or double adj layer adj capacitor)	USPAT;	2002/06/27 10:22
		and (mesophase near4 (activated adj carbon adj fib\$3)) and	US-PGPUB	
		(conductive or graphite) and (current adj collector)		
39	0	(electrode or double adj layer adj capacitor) and (active or	EPO; JPO;	2002/06/27 10:29
		(mesophase near4 (activated adj carbon adj fib\$3))) and	DERWENT	
		(conductive or graphite) and (current adj collector) and		
		(concentration with collector with (surface or internal or inner		
		or gradient))	İ	
43	0	(electrode or double adj layer adj capacitor) and (mesophase	USPAT;	2002/06/27 10:30
		near4 (activated adj carbon adj fib\$3)) and (conductive or	US-PGPUB	2002/00/27 10:00
		graphite) and (current adj collector) and (concentration with	00 1 01 02	
		collector with (surface or internal or inner or gradient))		
35	495	(electrode or double adj layer adj capacitor) and (active or	EPO; JPO;	2002/06/27 10:35
	,,,,	(mesophase near4 (activated adj carbon adj fib\$3))) and	DERWENT	2002/00/2/ 10:55
		(conductive or graphite) and (current adj collector)	DEIXVEIVI	
16	13	429/\$.ccls. and (electrode or double adj layer adj capacitor)	USPAT;	2002/06/27 10:40
	.0	and (active or (mesophase near4 (activated adj carbon adj	US-PGPUB	2002/00/21 10:40
		fib\$3))) and (conduct\$4 or graphite) and (current adj	00-1 01 00	
		collector) and (concentration with collector with (surface or		
		internal or inner or gradient))		
46	13	(429/\$.ccls. and (electrode or double adj layer adj capacitor)	LICDAT:	2002/06/27 40:42
10	10	and (active or (mesophase near4 (activated adj carbon adj	USPAT; US-PGPUB	2002/06/27 10:43
		fib\$3))) and (conduct\$4 or graphite) and (current adj	US-PGPUB	
		collector)) and (concentration with collector with (surface or		
49	2653	internal or inner or gradient)) 429/\$.ccls. and (active or (mesophase near4 (activated adj	LICOAT	0000100774400
49	2003		USPAT;	2002/06/27 11:00
		carbon adj fib\$3))) and (conductive or graphite) and (current	US-PGPUB	
52	13	adj collector)	LIDDAT	0000/00/07 44 00
52	13	(429/\$.ccls. and (active or (mesophase near4 (activated adj	USPAT;	2002/06/27 11:02
		carbon adj fib\$3))) and (conductive or graphite) and (current	US-PGPUB	
		adj collector)) and (concentration with collector with (surface		
	40	or internal or inner or gradient))		
55	13	((429/\$.ccls. and (active or (mesophase near4 (activated adj	USPAT;	2002/06/27 11:02
		carbon adj fib\$3))) and (conductive or graphite) and (current	US-PGPUB	
		adj collector)) and (concentration with collector with (surface		
		or internal or inner or gradient))) or (429/\$.ccls. and		
		(electrode or double adj layer adj capacitor) and (active or	(
		(mesophase near4 (activated adj carbon adj fib\$3))) and		
		(conduct\$4 or graphite) and (current adj collector) and	_ 8	
		(concentration with collector with (surface or internal or inner		
		or gradient)))		
	24	252/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:56
		(activated adj carbon near4 fib\$4)	US-PGPUB	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
-	60	204/\$ ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:57
		(activated adj carbon near4 fib\$4)	US-PGPUB	

Search History 6/27/02 11:04:15 AM Page 1

-	76	361/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:57
		(activated adj carbon near4 fib\$4)	US-PGPUB	
-	95	(· · · · · · · · · · · · · · · · · · ·	USPAT;	2002/04/24 07:57
		(activated adj carbon near4 fib\$4)	US-PGPUB	
-	0	(204/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:54
		(activated adj carbon near4 fib\$4)) and meso	US-PGPUB	İ
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		(activated adj carbon near4 fib\$4)) and (bonded or binder	US-PGPUB	
		near4 collector)		
-	24	(204/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/23 15:39
İ		(activated adj carbon near4 fib\$4)) and (bonded or binder	US-PGPUB	
		near4 collector)		
-	43	(429/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/23 15:40
1		(activated adj carbon near4 fib\$4)) and (bonded or binder	US-PGPUB	
-	İ	near4 collector)		
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		near4 collector)		
-	1	(252/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:53
ŀ	_	(activated adj carbon near4 fib\$4)) and meso	US-PGPUB	
-	5	(361/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:52
	_	(activated adj carbon near4 fib\$4)) and meso	US-PGPUB	
-	3	(429/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:53
	_	(activated adj carbon near4 fib\$4)) and meso	US-PGPUB	
-	7	(252/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:41
		(activated adj carbon near4 fib\$4)) and (carbohydrate or	US-PGPUB	
		cellulose or carbomethoxy adj cellulose or cmc)		
-	11	(204/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:39
		(activated adj carbon near4 fib\$4)) and (carbohydrate or	US-PGPUB	
	0.4	cellulose or carbomethoxy adj cellulose or cmc)		,
-	24	(429/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:41
		(activated adj carbon near4 fib\$4)) and (carbohydrate or	US-PGPUB	
	0.4	cellulose or carbomethoxy adj cellulose or cmc)		
-	24	(361/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:39
		(activated adj carbon near4 fib\$4)) and (carbohydrate or	US-PGPUB	
	7	cellulose or carbomethoxy adj cellulose or cmc)		
-	·	(252/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:42
		(activated adj carbon near4 fib\$4)) and (carbohydrate or	US-PGPUB	
_	24	cellulose or carbomethoxy adj cellulose or cmc)		
_	24	(361/\$.ccls. and (electrolyte or electrode or capacitor) and (activated adj carbon near4 fib\$4)) and (carbohydrate or	USPAT;	2002/04/24 07:43
		cellulose or carbomethoxy adj cellulose or cmc)	US-PGPUB	
_	24	(429/\$.ccls. and (electrolyte or electrode or capacitor) and	LICDAT	0000/04/04 07 40
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		cellulose or carbomethoxy adj cellulose or cmc)	US-PGPUB	
_	11	(204/\$.ccls. and (electrolyte or electrode or capacitor) and	LICDAT.	0000004/04 07 40
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		cellulose or carbomethoxy adj cellulose or cmc)	US-PGPUB	
~	55	((252/\$.ccls. and (electrolyte or electrode or capacitor) and	LICDAT	2002/04/04 07:47
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	j	cellulose or carbomethoxy adj cellulose or cmc)) or	US-PGPUB	
ļ	1	((361/\$.ccls. and (electrolyte or electrode or capacitor) and		
		(activated adj carbon near4 fib\$4)) and (carbohydrate or		
ļ		cellulose or carbomethoxy adj cellulose or cmc)) or		
İ		((429/\$.ccls. and (electrolyte or electrode or capacitor) and		
		(activated adj carbon near4 fib\$4)) and (carbohydrate or		
		cellulose or carbomethoxy adj cellulose or cmc)) or		
		((204/\$.ccls. and (electrolyte or electrode or capacitor) and		
		(activated adj carbon near4 fib\$4)) and (carbohydrate or		
		cellulose or carbomethoxy adj cellulose or cmc))		
			L	

-	4	(((252/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:47
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	1	(activated adj carbon near4 fib\$4)) and (carbohydrate or		
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		cellulose or carbomethoxy adj cellulose or cmc)) or		
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-	5	(361/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:54
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-	3	(429/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:54
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-	7	((361/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:55
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)		(activated adj carbon near4 fib\$4)) and meso) or		,
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		(activated adj carbon near4 fib\$4)) and meso) or		
1		((429/\$.ccls. and (electrolyte or electrode or capacitor) and		
		(activated adj carbon near4 fib\$4)) and meso)		
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		(activated adj carbon near4 fib\$4)	US-PGPUB	
-	76	361/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 08:13
		(activated adj carbon near4 fib\$4)	US-PGPUB	=====================================
-	60	204/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:58
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-	24	252/\$ ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 07:58
		(activated adj carbon near4 fib\$4)	US-PGPUB	
-	7	((429/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT;	2002/04/24 08:00
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		electrode or capacitor) and (activated adj carbon near4 fib\$4)		
) or (252/\$.ccls. and (electrolyte or electrode or capacitor)	1	
		and (activated adj carbon near4 fib\$4))) and meso	1	
-	212	(429/\$.ccls. and (electrolyte or electrode or capacitor) and	USPAT:	2002/04/24 08:04
		(activated adj carbon near4 fib\$4)) or (361/\$.ccls. and	US-PGPUB	2002/07/29 00:04
		(electrolyte or electrode or capacitor) and (activated adj		
		carbon near4 fib\$4)) or (204/\$.ccls. and (electrolyte or		
]	electrode or capacitor) and (activated adj carbon near4 fib\$4)		
	1) or (252/\$.ccls. and (electrolyte or electrode or capacitor)		
]	and (activated adj carbon near4 fib\$4))	}	
-	7318	honda adj giken adj kogyo adj kabushiki adj kaisha	USPAT;	2002/04/24 08:16
		and Surem and the State and transfer and training	US-PGPUB	2002/04/24 00.10
_	79	(honda adj giken adj kogyo adj kabushiki adj kaisha) and	USPAT;	2002/04/24 08:24
		activated adj carbon	US-PGPUB	2002/04/24 00.24
-	6	((honda adj giken adj kogyo adj kabushiki adj kaisha) and	USPAT;	2002/04/24 00:47
	j j	activated adj carbon) and cellulose	US-PGPUB	2002/04/24 08:17
- 1	o	((honda adj giken adj kogyo adj kabushiki adj kaisha) and	USPAT;	2002/04/24 00:04
		activated adj carbon) and meso		2002/04/24 08:24
_	o	(honda adj giken adj kogyo adj kabushiki adj kaisha) and	US-PGPUB	0000/04/04 00 00
		meso	USPAT;	2002/04/24 08:25
_	6		US-PGPUB	0000/00/00 54 44
ĺ		(mesophase near4 (activated adj carbon adj fib\$4)) and electrode	USPAT;	2002/06/26 21:11
_	3		US-PGPUB	0000/00/00 = : : :
-	3	(mesophase near4 (activated adj carbon adj fib\$4)) and electrode	EPO; JPO;	2002/06/26 21:10
		CIECHOUS	DERWENT;	
		11:04:15 AM Page 3	IBM_TDB	

-	4	429/\$.ccls. and (mesophase near4 (activated adj carbon adj fib\$4)) and electrode and concentration	USPAT; US-PGPUB	2002/06/26 21:12
_	5	429/\$.ccls. and (mesophase near4 (activated adj carbon adj fib\$4)) and electrod	USPAT; US-PGPUB	2002/06/26 20:56
-	5	· · · · · · · · · · · · · · · · · · ·	USPAT; US-PGPUB	2002/06/26 21:04
-	О	(mesophase near4 (activated adj carbon adj fib\$4)) and electrode	USOCR	2002/06/26 21:12
-	6	(429/\$.ccls. and (mesophase near4 (activated adj carbon adj fib\$4))) or (429/\$.ccls. and (mesophase near4 (activated adj carbon adj fib\$4)) and electrode) or (429/\$.ccls. and (mesophase near4 (activated adj carbon adj fib\$4)) and electrode and concentration) or ((mesophase near4 (activated adj carbon adj fib\$4)) and electrode)	USPAT; US-PGPUB	2002/06/26 21:13

PATENT ABSTRACTS OF JAPAN

(11)Publication number:

2001-135555

(43)Date of publication of application: 18.05.2001

(51)Int.CI.

HO1G 9/058

(21)Application number : 11-311540

(71)Applicant: HONDA MOTOR CO LTD

(22)Date of filing:

01.11.1999

(72)Inventor: IWAIDA MANABU

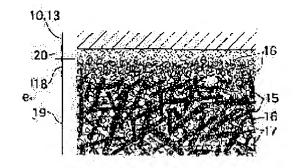
KOMAZAWA EISUKE

(54) ELECTRODE IN ELECTRIC DOUBLE LAYER CAPACITOR

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an electrode in an electric double layer capacitor for reducing contact resistance with a collector.

SOLUTION: An electrode(e) of an electric double layer capacitor includes an active substance 15 and a conductive material 16 and at the same time, joined to collectors 10 and 13. In this case, an electrode surface 18 of the electrode(e) joined with the collectors 10 and 13 has conductive-material density higher than that of an electrode inside 19.



LEGAL STATUS

[Date of request for examination]

22.12.2000

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

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- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

CLAIMS

[Claim]

[Claim 1] The electrode for electric double layer capacitors characterized by the electric conduction material concentration of the electrode surface section (18) joined to the aforementioned collection **** (10, 13) being higher than the electric conduction material concentration inside an electrode (19) in the electrode for electric double layer capacitors joined to ****** (10, 13), including an active material (15) and electric conduction material (16).

[Claim 2] The aforementioned active material (15) is the electrode for electric double layer capacitors

of the claim 1 publication which is fibrous mesophase active carbon.

[Translation done.]

PATENT ABSTRACTS OF JAPAN

(11)Publication number:

2001-052971

(43)Date of publication of application: 23.02.2001

(51)Int.Cl.

HO1G 9/058 CO1B 31/12

HO1G 9/038

(21)Application number: 11-226717

(71)Applicant: HONDA MOTOR CO LTD

(22)Date of filing:

10.08.1999

(72)Inventor: NOGUCHI MINORU

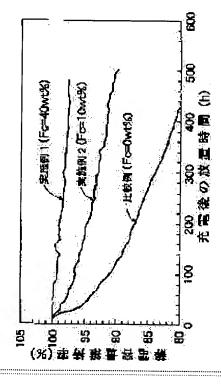
IWAIDA MANABU

(54) ELECTRIC DOUBLE-LAYERED CAPACITOR

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an electric double-layered capacitor of a large electrostatic capacity with superior durability.

SOLUTION: As an electrolyte, a propylene carbonate solution of borofluoride quaternary ammonium compound is used. Its electrode comprises an alkali active carbon whose material is mesophase pitch, and a conductive filler, having a rest potential smaller than that of the alkali active carbon in the electrolyte. The amount of a conductive filler Fc of the electrode is set to 10 wt.%≤Fc≤40 wt.%.



LEGAL STATUS

[Date of request for examination]

26.05.2000

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[Date of final disposal for application]

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- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

CLAIMS

[Claim]

[Claim 1] It is the electric double layer capacitor which has an electric conduction filler with rest potential smaller than the rest potential of the alkali activation charcoal with which the electrode uses a mesophase pitch as a raw material in the electric double layer capacitor using the propylene carbonate solution of the hoe fluoride 4th ammonium compound as electrolytic solution, and the aforementioned alkali activation charcoal in the aforementioned electrolytic solution, and is characterized by the loadings Fc of the aforementioned electric conduction filler in the aforementioned electrode being 10wt%<=Fc<=40wt%.

[Translation done.]

PATENT ABSTRACTS OF JAPAN

(11)Publication number:

2001-126966

(43)Date of publication of application: 11.05.2001

(51)Int.Cl.

HO1G 9/058

(21)Application number: 11-305814

(71)Applicant: HONDA MOTOR CO LTD

(22)Date of filing:

27.10.1999

(72)Inventor: MURAKAMI KENICHI

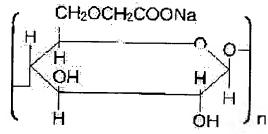
TAKESHITA YUKIHIRO

OKI NAOHIKO

(54) ELECTRODE-FORMING SLURRY IN ELECTRIC DOUBLE-LAYER CAPACITOR (57) Abstract:

PROBLEM TO BE SOLVED: To provide an electrode-forming slurry and an electrode in an electric double-layer capacitor for uniformly distributing meso-phase activated carbon and obtaining an electrode of high strength.

SOLUTION: An electrode-forming slurry is for use in doctor blade method and contains mesophase activated carbon and carboxymethylcellulose(CMC), and the degree of etherification of CMC is set in the range of $0.6 \le De \le 0.9$.



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[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

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- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

CLAIMS

[Claim]

[Claim 1] The slurry for electrode formation of the electric double layer capacitor characterized by the degree De of etherification of CMC being 0.6 <=De<=0.9 including mesophase active carbon and CMC.

[Claim 2] The electrode of the electric double layer capacitor characterized by the degree De of etherification of CMC being 0.6 <=De<=0.9 including mesophase active carbon and CMC.

[Translation done.]